

Date: Sat, 26 Feb 94 04:30:12 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #48  
To: Ham-Ant

Ham-Ant Digest                      Sat, 26 Feb 94                      Volume 94 : Issue    48

Today's Topics:

160 M on G5RV  
A crazy antenna  
A question (2 msgs)  
Design of Yagi Antenna  
Simple Signal Question

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Fri, 25 Feb 1994 03:43:41 GMT  
From: unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!swrinde!cs.utexas.edu!  
howland.reston.ans.net!europa.eng.gtefsd.com!news.msfc.nasa.gov!  
sol.ctr.columbia.edu!newsxfer.itd@mzb.saic.com  
Subject: 160 M on G5RV  
To: ham-ant@ucsd.edu

regular  
Keywords: G5RV

Has anyone figured out how much wire you need to add to a regular  
G5RV to tune it to 160 M? Mine is 102' with the 30' of 450 ohm  
ladder line and I normally run it on 75 and 40 M through a MFJ-949D  
tuner. I've thought of putting up a dipole for 160 but thought that  
someone may have done some testing with the addition to a normal  
G5RV and maybe(?) not experienced much difference on other bands  
while accessing 160. I suspect that the answer is the addition of

something over 60' on each end to get it to tune.  
Thanks in advance.

--

73 de Ed Engel N7UQZ  
Internet: eengel@eskimo.com

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Date: Fri, 25 Feb 1994 15:34:12 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
europa.eng.gtefsd.com!library.ucla.edu!csulb.edu!csus.edu!netcom.com!netcomsv!  
bongo!julian@network.ucsd.edu  
Subject: A crazy antenna  
To: ham-ant@ucsd.edu

In article <2kkj4d\$1fd@cismsun.univ-lyon1.fr> elendir@enst.fr (Elendir) writes:  
> It's just an attempt to design an antenna which would receive all  
> polarizations

This type of antenna is called "Circularly polarised". There  
are several designs around.

--

Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366  
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

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Date: Fri, 25 Feb 1994 15:34:18 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!swrinde!  
emory!rsiatl!ke4zv!gary@network.ucsd.edu  
Subject: A question  
To: ham-ant@ucsd.edu

In article <2kj3e1\$eb0@master.cs.rose-hulman.edu> derry@NeXtWork.Rose-Hulman.Edu  
(John Derry) writes:  
> If I am given two choices as follows on some inexpensive coax at a hamfest  
> fleamarket which do I buy?  
>  
> The cables are identical in every way, same markings, price, length, etc.  
>  
> At 144 MHz, when I measure the SWR with an accurate SWR meter one cable  
> gives a SWR = 10 and the other gives SWR = 6. (SWR being measured at one  
> end and the other end open (Or shorted.)  
>  
> Which cable should I buy?

That's a softball question. Obviously buy the one with the higher SWR.  
For the reasons, search the archives for my treatise entitled "SWR is  
your friend".

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Fri, 25 Feb 1994 19:01:11 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!sdd.hp.com!  
hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu  
Subject: A question  
To: ham-ant@ucsd.edu

John Derry (derry@NeXTwork.Rose-Hulman.Edu) wrote:

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: gives a SWR = 10 and the other gives SWR = 6. (SWR being measured at one  
: end and the other end open (Or shorted.)

: Which cable should I buy?

The higher SWR indicates lower loss: more of the reflected wave made it  
all the way back to be measured by the SWR meter. \_IF\_ the SWR meter  
is calibrated for use with the impedance that the line is, then you  
can fairly easily calculate the line loss from the measured SWR.

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Date: Fri, 25 Feb 1994 15:36:23 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
europa.eng.gtefsd.com!library.ucla.edu!csulb.edu!csus.edu!netcom.com!netcomsv!  
bongo!julian@network.ucsd.edu  
Subject: Design of Yagi Antenna  
To: ham-ant@ucsd.edu

In article <2kktk7\$hj2@hippo.shef.ac.uk> el931393@sunc.sheffield.ac.uk (C H Teo)  
writes:

>  
>I'd like some information about designing Yagi antennas.  
>It will be appreciated if you could send me a post on the  
>subject or direct me to FTP sites which holds info/FAQs  
>etc.

Besides the excellent handbooks produced by the ARRL and RSGB,  
there are also many books on antennas, some exclusively about  
Yagis available.

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Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366  
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

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Date: 25 Feb 1994 16:58:32 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!  
news.aero.org!Aero.org!cantrell@network.ucsd.edu  
Subject: Simple Signal Question  
To: ham-ant@ucsd.edu

In article <2kk57u\$rt9@sugar.NeoSoft.COM>, dlc@sugar.NeoSoft.COM (Dane L.  
Cantwell) writes:

|>  
|> A friend and I were talking about cellular phones. He is in the market  
|> for one and we were talking about the merits of a "full size" phone at 3  
|> watts versus a portable at 0.6 watts. It was my point that the extra  
|> transmission power is discounted because the signal received at tower is  
|> related to the square of the distance to the tower.... therefore you  
|> don't get anything like 5 times the range with a 3 watt model over a 0.6  
|> watt unit. Is this right in theory? How about the real world?  
|>  
|> I realize that the assumption I am making assumes a point source that  
|> would radiate in all directions. How close is this assumption to the  
|> real world antennas? Comments please.

|>  
|> Dane Cantwell - dlc@neosoft.com  
|> Petroleum Engineer  
|>  
|>

Seeing as how you have such a great name, I couldn't help but throw in my two  
cents :-)

Another thing to think about is that, with most systems today, the cell receiving  
antenna sends commands to change the output power of the phone. That is, the

base antenna will issue commands to step down (or up) the output power of the phone so that the minimum power necessary for the connection is used.

Great, you say, I will just wire up my phone so that it ALWAYS blasts out the 3 watts regardless of what anybody says. Unfortunately, most systems recognize this and, if you don't do as they say, the system will just cut you off.

Having the higher power unit might be worthwhile if he is going to spend a lot of time in fringe coverage areas, but if the area he will use is well 'celled' he should probably put his money in a better antenna.

So much for my comments.

Yours,  
cantrell

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End of Ham-Ant Digest V94 #48  
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